EFFECTS of 300-ft. drop on auto chassis are examined by students at Sandia's 300-ft. drop tower in Area III. Students also visited sled track, centrifuge, and other test facilities during Science Fair tours. For more pictures of the Science Fair see pages four and five.

International Cooperation

U.S. Provides Reactor Fuels In Atoms-for-Peace Program

President Eisenhower launched the Atoms-for-Peace program in 1953, and steadily since that time there have been important contributions to expanding the civilian uses of atomic energy. A key feature of the program is the sale of enriched uranium by the United States for fuel in research and power reactors abroad.

The Atoms-for-Peace program for international cooperation in the nuclear field, made possible by the 1954 law and expanded under subsequent amendments, has become part of U.S. foreign policy and assistance.

It was launched by President Eisenhower at the United Nations on Dec. 8, 1953, in the hope that diversion of special nuclear materials from weapons stockpiles to civilian uses would be the result. An international organization was proposed that would serve as a "world bank" for fissionable materials which could be drawn upon for peaceful uses.

Less than three years later, the International Atomic Energy Agency came into being, but the goal of diversion of uranium from weapon production was thwarted by the sudden change from scarcity to abundance in supplies of uranium and by continued Soviet obstruction to workable test ban and disarmament agreements.

The Atoms-for-Peace program, however, has made and continues to make important contributions to expanding the civilian uses of nuclear energy. Pending the organization of the IAEA, United States worked out an extensive cooperative program with friendly countries, using bilateral and multilateral agreements. A key feature is the sale by the United States of enriched uranium for fuel in research and power reactors abroad, under prudent safeguards that insure against diversion of the material to military use.

As of June 30, 1962, more than 75,000 pounds of enriched fuel containing 3333 pounds of U-235 had been supplied to 30 countries. Also, 430 tons of heavy water had been furnished and many shipments made of gram quantities of plutonium, U-233, and rare isotopes for research purposes.

Reactor Grants

To stimulate nuclear research and training, the United States has made grants to 26 countries

(Continued on Page 2)

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MAY 24, 1963

Inspector of Fire Hazards Finds Chance to Become Fire Fighter

Walt Smith's job is inspecting gasoline tank." Sandia Laboratory buildings for fire hazards. Last week, he found more than a hazard—he found a real live fire. And put it out,

He had just completed an inspection of Bldg. 840 and had walked out the south door of the building. There, he met two employees who were dashing toward a telephone. "The forklift's on fire," they said.

Walt grabbed a fire extinguisher from a nearby forklift and proceeded to douse the smoking engine compartment of another

"It was a short in the wiring," Walt said, "causing the smoke. Luckily, we caught it before it blazed and maybe exploded the

Jack Hueter Heads Information Committee Of Industrial Engineers

Jack Hueter (2463) was named chairman of the Information Committee for the Value Engineering Division of the American Institute of Industrial Engineers during the group's annual conference and convention in Denver, Colo., May 9-11.

The Albuquerque Area Chapter was honored during the meeting with an Award of Excellence for activities of the past year. A. D. Smailer (2563), president, accepted the plaque for the chapter.

After using the extinguisher, Walt called the Sandia Base Fire Department, not for a fire engine but for a safety inspection of the forklift. He also called the Motor Pool for a mechanic to check the machine before it was moved.

Walt has been a fire inspector in Plant Engineering Department's Inspection Section 4542-1 for about 13 years. He was a member of the Oklahoma City Fire Department for six years prior to coming to Sandia. "I thought I'd retired from fighting fires." he said.

Paper at Conference

R. S. Cox, supervisor of Cost Division 4152, will present a threepart paper during the National Office Management Association's 44th International Conference at Pittsburgh, Pa., June 2-5.

Mr. Cox will appear on the program three times during the convention to discuss "The Systems Program (Large Office Department)." The detailed presentation will include discussion of office systems group organization, responsibilities, planning and control of systems projects, approaches to comprehensive planning, documenting, control techniques, evaluating, and implement-

R. S. Cox to Present L. E. Hollingsworth Named Director Of Field Testing

Lee E. Hollingsworth, manager of Test Department 8120 at Livermore Laboratory since 1957, has been appointed Director of Field Testing 7200, effective June 1.

He replaces D. B. Shuster, who will become Director of the newly-formed Aerospace Programs Organization 7400.

Mr. Hollingsworth has been with Sandia Corporation since Oct. 1951, starting as a staff member in a Project Engineering Division (1242). He was promoted to section supervisor in the same organization in March 1952, and was promoted to head the division in Feb. 1953. He was promoted to department manager of Organization 1240 in July 1955.

Following his transfer to Livermore in Sept. 1956, he became manager of Engineering Department 1270. He was assigned to his present position as manager of the Test Department at Livermore Laboratory in Sept. 1957.

Mr. Hollingsworth has participated in the Redwing, Hardtack, and Dominic full-scale nuclear test series, serving as a Sandia Deputy Director in Dominic.

He received his BS degree in engineering physics from the University of California in Berkeley in 1950, where he was a member of Tau Beta Pi, engineering honorary society. He is a senior member of the Institute of Electrical and Electronic Engineers (formerly IRE).

Since his arrival in Livermore, Mr. Hollingsworth has been active in community service work, on the board of directors and later as president of the board of the Valley Memorial Hospital.

Car Thieves Making Career of Visits to California Couple

April 3 was a disconcerting day for Mel and Cecille Brown (8127-1/ 8212-3). Their bright white 1962 sports car was stolen. It turned up later, stripped and burned. The car was a total loss, but it was covered by insurance.

After placing an order for a new sports car, which would arrive some weeks hence, they bought a 1951 sedan to use for transportation in the meantime. They didn't buy theft insurance for the car since they felt their chances of having another car stolen in the same year were nil, and besides, "Who'd want to steal an old 1951 car?'

On May 3, exactly one month from the first theft, their 1951 car was stolen. It was found two weeks later, 40 miles away, abandoned and undamaged.

Sandia Laboratory's Security Inspectors Pepper Targets in Marksmanship Tests

For the past month Sandia Laboratory security inspectors and their supervisors have been undergoing annual requalification with .38 caliber side arms.

The men have been assigned to teams which compete at the small arms range located in Area X, east of Coyote Canyon. Upon completion of the qualification, trophies will be awarded to the individual with the highest score, and to the team with the score showing the greatest improvement over last year.

The retraining includes show- from 10 yards; 5 rounds in 30 ing of a California Highway Patrol movie, "The Revolver," safety instruction in the handling of all firearms, familiarization with the .22 caliber revolver, firing on a bull's-eye target, and instructions and familiarization in firing a 12 gauge shotgun.

Qualification with the .38 caliber revolver, firing the Sandia Corporation Security Practical Pistol Course on a silhouette target, includes: 10 rounds in 30 seconds from a crouch position fication on this target.

seconds in a prone position from 55 yards; 5 rounds each in sitting, prone, standing behind a barricade, with each hand (20 rounds total) within 3 minutes 30 seconds from 50 yards; 5 rounds each in off-hand (or natural shooting stance), standing behind a barricade, with each hand (15 rounds total) within 2 minutes, 30 seconds from 25 yards.

Possible points scored are 100, with 60 points required for quali-



FIRING FROM A PRONE POSITION at distance of 55 Security Handgun Course. Leo Baca (3242) is shooting and 50 yards from the silhouette target is part of the in the foreground; Bill Fribley (3242) stands nearby.

U.S. Provides Reactor Fuels

totaling \$5,950,000 toward the cost of new research reactors. About 20 of these units are in operation. Also, 88 comprehensive technical libraries, which are kept updated, have been donated to many countries and international organizations.

Nuclear power was the topic of greatest interest at the historic United Nations Conference on Peaceful Uses of Atomic Energy, which brought 1400 scientists, including delegations from the USSR and the Soviet Bloc countries, to Geneva, Switzerland in August 1955.

In February 1956, the United States announced that 40,000 kilograms of contained U-235 would be allocated, as needed, for civilian uses of atomic energy. One half would be for domestic use and the other would be for fueling power and research reactors in friendly foreign countries.

Additional allocations have brought the total U-235 available today to 100,000 kg for use in the United States and 65,000 for other countries.

In November 1956, government charges on enriched uranium were announced. Improvements in production and processing have made it possible to reduce these prices 30-40 per cent since then. The AEC has assured reactor operators in the United States and abroad that the supply of enriched U-235 is adequate to meet all presently foreseeable demands for this reactor fuel.

Foster Civilian Uses

When the Atoms-for-Peace program was launched, only 19 countries had government organizations set up to foster the civilian uses of nuclear energy. Today there are atomic energy commissions in one form or another in more than 60 nations.

In 1958, the European Atomic Energy Community (EURATOM). consisting of Belgium, France, West Germany, Italy, Luxembourg, and the Netherlands, was organized. The United States is cooperating with it through an extensive program of assistance in nuclear power development. Several other multi-nation nuclear organizations are now active in stimulating peaceful uses of nuclear energy. A second UN Peaceful Uses Conference in 1958 was attended by more than 6000 persons.

Capstone of the Atoms-for-Peace program is the International Atomic Energy Agency



Sally Young (2643)

Take a Memo, Please

Failure to follow accepted safety procedures can be a cause of an accident.

with headquarters in Vienna, Austria. The IAEA was five years old on July 29, 1962, and today 78 countries are members.

In these five years, the Agency has given fellowship assistance to nearly 1800 students. An additional 1500 trainees have attended radioisotope techniques courses carried out with the Agency's two mobile laboratories (donated by the United States). Approximately 5000 persons, principally nuclear scientists and engineers, have attended some 50 IAEA-sponsored scientific conferences, symposia and seminars. Assistance missions have been sent to 34 countries. mostly to the lesser developed na-

Not all advances in the area of nuclear science stem directly from the 1942 achievements of controlled chain nuclear reaction. Among these are the rapid discovery of numerous subatomic particles and of nine new man-made elements. Also noteworthy is the AEC's Plowshare program to develop peaceful uses for nuclear explosives. These will be discussed in the next article of this series.



"BOSS OF THE YEAR" title was bestowed upon C. M. Clendenin (7242-3) by Albuquerque members of the American Business Women's Association during a banquet at Albuquerque Country Club, May 15. His name, submitted by computer operator Mary Ellen Flanagan, was chosen for his business and civic activities.

MARS Members in New Mexico to Meet On Sandia Base June 1

Members of New Mexico Army MARS (Military Affiliate Radio System) will hold their annual statewide convention on Sandia Base June 1-2.

The MARS program started in 1925 to promote additional radio circuits and radio communications personnel in the event of a national emergency, and to coordinate practices and procedures of amateur radio operators with those of the military communications system. In 1950 the program was expanded to include civilian member stations, and three years later age of participants dropped from 21 to 16 years.

The New Mexico Army MARS covers practically every city and town in New Mexico, including villages which do not even have telephones

Members must hold a valid amateur license and have transmitting and receiving equipment capable of operating on at least two of the assigned frequencies for the net to which they make application.

Information about the convention or membership may be obtained from Virginia T. Sims (4611-3), MARS radio station

Congratulations

Mr. and Mrs. George Baldonado (4152-2) a son, George, on May 14. Mr. and Mrs. R. Norris Rose (3122) a daughter, Laurie Lynette, on May 15.

Mr. and Mrs. Bill Emrick (2442-1) a daughter, Melanie Jo, on Apr. 16.

Mr. and Mrs. Larry O'Connell (2444-2) a son, Timothy James, on May. 7.



Tightness or Pain in Chest May Be Sign of Heart Trouble By Civil Defense

by S. P. Bliss, M.D. Sandia Corporation Medical Director

This series of articles is concerned with diseases of the heart and blood vessels. The previous articles discussed hardening of the arteries and heart attacks. The next article will be concerned with

Angina pectoris is an uncomfortable sensation of pressure, tightness, or pain, usually in the

The discomfort is a symptoma brief warning—that the blood supply to a portion of the heart muscle is inadequate for the mo-

Most common underlying cause of angina pectoris is atherosclerosis of the coronary arteries. Effort, excitement, exposure to cold and wind, or digesting a heavy meal are likely to bring it on in a susceptible person.

As a rule, it is relieved in a short time by rest or by nitroglycerine tablets

Sometimes anginal pains are a forerunner of a heart attack. That is why chest pains should be reported promptly to a physician. Sometimes they occur in people who never had a heart attack and who may never have one; for the process of collateral circulation that increases the blood supply to the heart muscle after a heart attack can also come to the aid of the person with private parties. angina pectoris.

Very often, chest pain is due to other causes, but the diagnosis can be made only by a physician.

Sympathy

To Clarence T. Gutierrez (4574) for the death of his mother Apr. 30 in Ranchos de Taos.

To Lillian C. Jackson (7241) for the death of her mother May 9. To Bob Hole (4611-3) for the death of his grandfather in Indi-

ana. To Barbara V. Ruminski (3460) for the death of her father-in-law on Mar. 13 and her mother-in-law on May 9 in New Jersey.

To Alan Y. Pope (7130) for the death of his mother in Atlanta, Ga., May 8.

To Willie L. Smith (4511-1) for the death of his father-in-law in Oklahoma May 9. To L. Claude Morrison (4514-4)

in Louisiana May 9. To J. T McIlmoyle (7123-4) for the recent death of his father in

for the death of his father-in-law

Pool Plungers Will Start Coronado Club Season May 30

The swimming season will officially get underway at the Coronado Club, Memorial Day, May 30, with all pools heated for the first time.

The pools will be open from 10 a.m. to 6 p.m. every day through the summer season. Season swim tickets may be obtained in advance at the club office. Adult season tickets are \$8; children's season tickets are \$4. Single swimming tickets are 65 cents week-days and 90 cents week-end for adults, and 35 cents and 60 cents respectively for children.

Swimming lessons for children will start June 7 with several classes slated. Lesson tickets are \$3 (each class meets three times a week for a month) and are available at the club office.

The pool and patio area may also be rented by club members for

Considerable work has been done on the club premises during recent months. The club house and patio area fencing have been painted inside and out, utilizing a new color scheme. The filter systems of both large pools have been overhauled preparatory to summer use, and all pools have been repainted. New benches have also been obtained for use in the patio area.

Medical Self-Help Course to Be Given

The Albuquerque and Bernalillo County Civil Defense Organization will present a Medical Self Help Course in Albuquerque beginning in June. Everyone from junior high school age upward is eligible to receive the training.

Classes will be held June 6, 13, 20, 27, and July 11 and 18 at Room 204, Mitchell Hall, UNM Campus. Sessions will be from 7:30 to 9:30 p.m. Registrations, which will begin in June, may be made by calling Civil Defense Headquarters, 247-9536. Instructor for the course will be Mrs. Barbara Armijo.

The course was prepared by the U.S. Public Health Service. It is designed to teach American families the environmental health aspects of a modern war emergency, and how to meet their own health needs during an emergency if deprived of a physician's services. Goal of the course is to train one member of every family in medical self help.

Training will cover radioactive fallout and shelter; hygiene, sanitation and vermin control: water and food; shock; bleeding and bandaging; fractures and splinting; transportation of the injured; burns; nursing care of the sick and injured; infant and child care; and emergency childbirth.

Preference in registration will be given to those who wish to take the course in order to teach it to others.

Irene Berger Wins

All Events winner of the recent Sandia Laboratory Women's Bowling Tournament held at the Coronado Club was Irene Berger (4632). Irene racked up 1268 pins for top total score for six games.

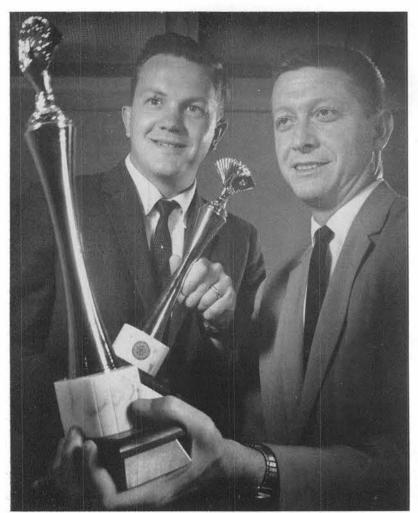
sandia corporation albuquerque livermore

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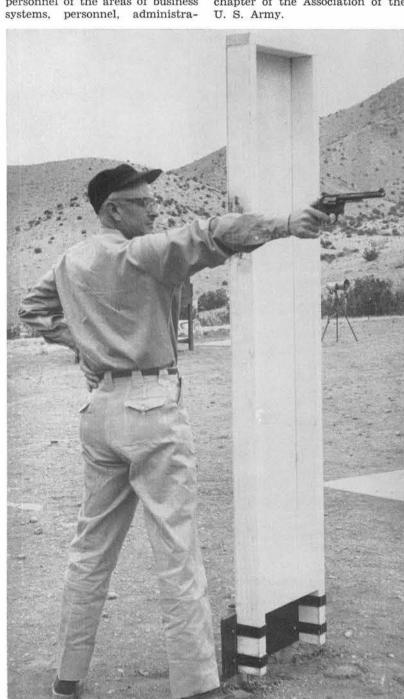
BRIDGE CHAMPS — R. B. Abbott (left) and W. V. Hereford (both 7215) emerged champions of the recent Sandia Laboratory bridge tournament. The pair survived Laboratory-wide playoffs during noon hours and defeated 18 other teams during final playoffs at the Coronado Club.

D. E. Irvin Heads Local Chapter of National Office Management Ass'n.

Dean E. Irvin, supervisor of Community Relations Division 3433, was elected president of the Albuquerque Chapter of the National Office Management Association (NOMA), May 20. Previously, he held the offices of treasurer (1961), second vice president (1961-62), and first vice president (1962-63).

NOMA is an international organization of about 19,000 members; it is comprised of executive personnel of the areas of business tive services, and advanced management.

Dean has been a member of the local chapter of the organization since 1960. He is a member of the board of governors and executive committee of the Heights Branch YMCA, and chairman of its membership committee. He also serves as assistant commandant of the 4153rd Army Reserve School, and as first vice president of the Albuquerque chapter of the Association of the



OFF HAND or natural shooting stance is being used by Jim Henry (3242) in firing a .38 caliber revolver for his regualification as a security inspector. A silhouette target was used from various distances. See other photograph and story on requalification on Page One.

Dorothy V. Bair 4131 May 17, 1948



Eugene F. Carter 1422 May 18, 1948



Charles B. O'Keefe 3126 May 24, 1948



J. Hardin Simmons 4513 May 24, 1948



Elliott J. Dadian 4361 June 1, 1948



Herbert W. Gentry 4612 June 1, 1948



Frank N. Gurule 2624 June 1, 1948



Delia S. Stites 2643 June 1, 1948



Robley E. Irvin 2331 June 2, 1948



Bernard J. Myer 4135 June 2, 1948



Bill W. Scott 3426 June 3, 1948



William W. Arris 7536 June 7, 1948



Jimmie R. Burnside 4251 June 7, 1948

(7223-1).

impedance.

hospital.

Patent Assigned AEC

A patent for a Stabilized Tran-

sistor Amplifier has been assigned

to the Atomic Energy Commission

in the name of John B. Noe

fier circuit providing a highly

stable output signal over extreme

temperature ranges. A main fea-

ture is the extremely high input

Do You Know?

How frequently employees and

their dependents are hospital-

ized? How long do they stay in

the hospital and what does it

cost? In a recent 12-month per-

iod, 2,722 Health Care Plan par-

ticipants were hospitalized for

reasons other than normal ma-

ternity. On the average, they

were hospitalized 5.9 days and

were charged \$200.77 by the

The invention is a signal ampli-

In Name of Sandia

Lab's John B. Noe



David V. Doleshal 2331 June 7, 1948



Frank Duggin, Jr. 4314 June 7, 1948

Four Hills.



Donald E. Fitchhorn 4422 June 7, 1948



L. C. Hilderbrand 4614 June 7, 1948



Margaret L. Wetzel 3441 June 7, 1948

Jim Leonard Gets Second Tourney Win on Links

An unprecedented double championship has been racked up by Jim Leonard (7119) in the Sandia Employees Golf Association. Already champ of the Socorro Golf tournament, Jim took the Four Hills tournament on May 4 for the first double win in league history. Jim shot a low gross 76 at

Low net winner of the May 4 tourney was Ray Reynolds (7125) whose handicap of 20 brought his score to 66 for the 18 holes.

Winning team members were John Puhara (4413), Cliff Hiner (3242), A. C. Taylor (4254), and H. F. Linker (7125).

Third tournament of the SEGA will be held Saturday, June 1. This will be the Fred J. Given Memorial Tournament and will be played at the University of New Mexico golf course.

Entry blanks are available from Services and Recreation Section 3122-2, Bldg. 610. Deadline for entries is Monday noon, May 27.

10 Year Pins

June 1-7

Joe D. Benton 8124, Glenn R. Elliott 2452, Marian Q. Fortenbury 2561, Ernie Gurule 7332, A. H. Archuleta 2643, Frank J. Shingola 3242, Howard S. Bluestein 2531, Robert W. Hunke 7145, G. W. Anderson, Jr. 8142, and Frank P. Hudson 5411.

CREI Course Special Program 900 Available at Sandia

Technical and Trades Training Division 3132 has received a complimentary set of Capitol Radio Engineering Institute correspondence course material titled "Special Program 900." The material includes options in communications, servomechanisms, and computers. James Laugherty, field service representative of CREI, made the presentation.

Special Program 900 provides a coverage of solid-state devices, systems, and related subjects plus specialization in a major area of electronics.

The material will be retained in Division 3132 Z-branch library in Bldg. 813 for inspection by interested employees. For further information contact H. Grady Moore (3132-1), ext. 29238.



VOLLEYBALL ALL STARS — Top players of Sandia Laboratory teams were selected recently to compete in the All Star Tournament between Sandia Laboratory, Sandia Base, Kirtland Air Force Base, and Manzano. Sandia Lab came out third in the contest. In the front row are,

from left, Tom Traver (7323), Jim Randall (7325), Bill Kampfe (7323), and Ray Peabody (7324). Standing are John Otts 7324), Bob Henderson (7311), Bill Wilson (7325), Bill Hoffman (7323), Bob Klingler (7324), Harry Blechinger (7323). They played on 7300-1, -II team.

PAGE FIVE

The story in pictures

LAB NEWS

NSF-I and National Science Seminar Series

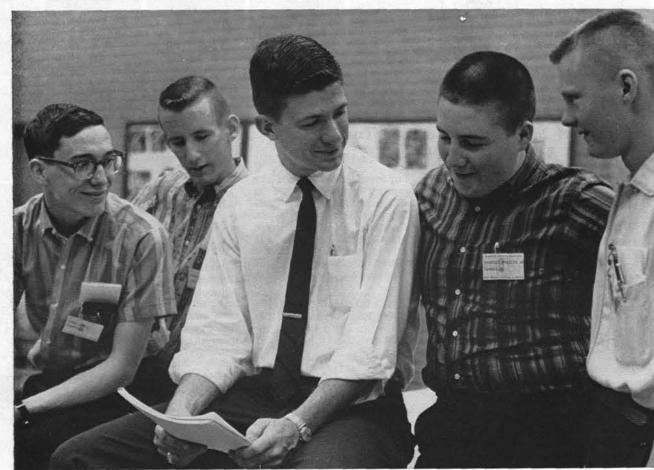


CHAIRMAN of the Atomic Energy Commission, Glenn T. Seaborg, addressed the opening session of the National Science Fair - International at the Civic Auditorium. Dr. Seaborg was also a leader of two sessions at the National Science Seminar Series.

The National Science Fair - International, held in Albuquerque May 6-12, is now a part of the past. It brought together more than 400 top science students from throughout the United States and from the free countries of the world. These young scientists showed thousands of visitors at the exhibition hall scientific projects which had earned them the privilege of being

Held separately, but concurrently with NSF-I was the National Science Seminar Series, sponsored by the New Mexico Academy of Science. More than 1000 visitors listened to 86 scientists present a series of theoretical discussions. These and other thousands saw an array of scientific displays presented by the Academy in the National Science Exposition.

Of the myriad of visual impressions coming out of the event-packed week, the Lab News photographer caught the ones presented here.



PLASMA DYNAMICS was the subject of New Mexico Academy of Science Seminar presentation made by Everet H. Beckner, Research Division III, 5153, center. Eight Sandians participated in the Academy's Seminar program.



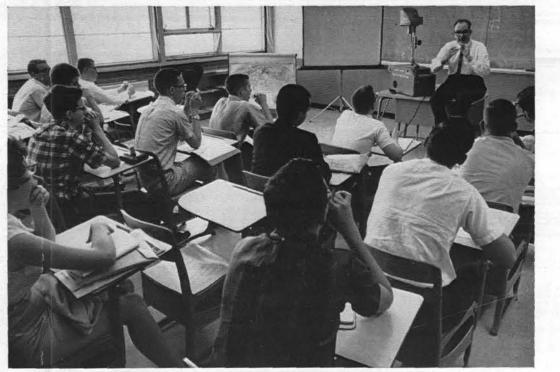
DR. WERNHER VON BRAUN, Director, George C. Marshall Space Flight Center, Huntsville, Ala., (center) visited with the staff of Sandia Laboratory last week. From left are S. P. Schwartz, Sandia Corporation President; Dr. von Braun; and K. F. Hertford, Manager, AEC Albuquerque Operations Office. Dr. von Braun was one of seven featured speakers presented by the New Mexico Academy of Science as part of the



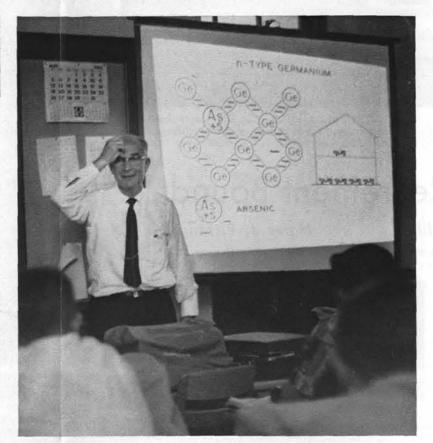
SEMINAR CHAIRMAN for the National Science Seminar Series, R. S. Claassen, Director of Physical Research 5100, center, conferred with S. P. Schwartz, President of Sandia Corporation, about seminar pre-



VISITING SANDIA LABORATORY last week between activities of the National Science Seminar was Dr. Edward Teller, Professor at Large of Physics, University of California, right. He is talking with K. F. Hertford, Manager, AEC Albuquerque Operations Office.



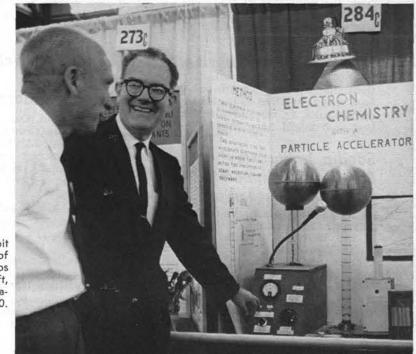
LASERS were the subject of New Mexico Academy of Science Seminar presentation made by G. C. Dacey, Sandia Corporation's Vice President, Research 5000. He also judged AEC special awards.



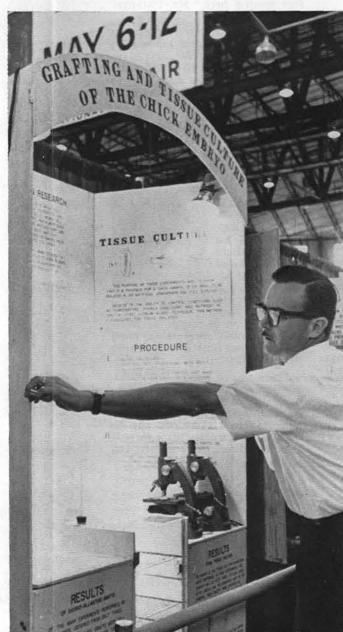
NOBEL PRIZE WINNER and inventor of the junction transistor, Dr. William Shockley, conducted a New Mexico Academy of Science seminar session for visiting Science Fair students at Highland High School.



FUNCTION of sled track in Sandia's Area III is explained to National Science Fair students by D. W. Bauder, supervisor of Track and Guns Section 7323-1. They also visited drop towers, centrifuge, and other test facilities in Area III, and saw laboratories, selected facilities in Area I.



PARTICLE ACCELERATOR exhibit at Science Fair caught interest of Norris E. Bradbury, Director of Los Alamos Scientific Laboratory, left, and G. C. Dacey, Sandia Corporation Vice President, Research 5000.



EXHIBITS Committee Chairman for Science Fair was J. W. Galbreath, manager of Public Relations and Employee Publications Department 3430, measuring dimensions of student exhibit.



CENTRIFUGE in Area III was an object of interest for National Science Fair students who toured Area III test facilities. They also visited scientific, industrial, and historical points of interest in New Mexico, in-

cluding Kirtland AFB, the Lovelace Foundation for Medical Education and Research, Los Alamos Scientific Laboratory, uranium mines and processing facilities near Grants, and Bandelier National Monument.



THE NATIONAL SCIENCE EXPOSITION attracted students and adults

Program Director for the Exposition and Seminars.

alike. The serious scientific purpose had its touches of fun for the youngsters, as is shown by this young lady who helped the lecturer in the Atomic Energy Commission exhibit. The Exposition was sponsored by the New Mexico Academy of Science. Irving Auerbach, 5153, was National Science Seminar Series.

Another Report on Seat Belts— Better Get Yours Installed

This is the story of a light blue Jeep, and a small song of praise for automobile safety belts.

On a Friday evening recently, Walt Dodd (3121-1), Darrel Brown (3121-1), Jack Mafit (3121), and Gordon Ross (3121-1) climbed into Jay Davidson's (3121-2) Jeep station wagon. They were going fishing at Greer Lake, south of Springerville, Ariz., and they were pulling a trailer.

Jay's Jeep is equipped with two safety belts in the front seat and one belt in the back seat (it folds down, so another belt couldn't be installed). The driver wore one belt, and two other front-seat passengers shared the other. And the back-seat passengers shared a belt. (Note: Normally, sharing of belts isn't recommended. Each passenger should have his own.)

"When we were about 14 miles north of Socorro—at about 7:30 p.m.—the trailer we were pulling started to whip," Jay recalled, "and we found ourselves veering from the right side of the highway to the left. We lost control and went down a 35-ft. embankment, rolling over twice in the process."

The passengers were all shaken up, but the seat belts held. "We were thankful for our foresight, even though we had to double up on the belts. In spite of the fact that they might have been over-

Sandia Laboratory Employees Winners In Chess Tournament

Five Sandia Laboratory employees have been named winners in the 1960 Bell System Postal Chess Tournament. The list of winners includes Richard C. Jackson (4421), Herman S. Levine (5414), Crawford J. MacCallum (5411), Harold M. Meidal (4232-4), and Robert E. Smith (7111).

The tournament is held yearly for employees of Bell System Companies. Because of postal mechanics and size of the tournament, it takes about two years to audit all the games in one tournament.

Entries for the 17th Annual Tournament will close July 12. Novices as well as experts are invited to enter. Players will be grouped into sections, according to individual skill. A point system is used to permit players to progress to a higher rated section; winner of the top section will be declared Bell System Champion.

Applications for the 1963 tourney may be obtained from the Chess Tournament Director, American Telephone and Telegraph Company, Room 1338, 195 Broadway, New York 7, N. Y.

stressed, they still kept us from being seriously injured," Jay continued.

The trailer was a total loss. The Jeep was badly bent. But the fishermen—thanks to their foresight—will go fishing again.

Junction Transistor Inventor Visits At Sandia Lab

Doctor William Shockley, Director of Shockley Transistor Corp., inventor of the junction transistor, and recipient of the Nobel Prize in physics in 1956, visited Sandia Laboratory May 8-9.

His activities at Sandia May 8 included a general orientation with J. W. Easley (5300) and F. M. Smits (5310), a tour of Area V facilities, and detailed discussions in the general area of radiation physics research. On May 9 he visited G. C. Dacey, Sandia Corporation Vice President, Research 5000, and conducted one of the National Science Seminars as well as presenting a special noon lecture to a larger group at Highland High School Auditorium.

AEC Lets Contract For Model Shop Bldg. at Livermore

Payne Construction Co., Oakland, Calif., has been awarded a contract by the Atomic Energy Commission to construct an extension to the Model Shop building at Sandia Corporation's Livermore Laboratory.

The Oakland firm's bid of \$557,312 was lowest of eight received for the work. The high bid was \$585,800.

The contract calls for construction of an 81 by 302 ft. low bay addition to an existing laboratory building. The structure will have a rigid steel frame and exterior walls of metal panels and reinforced concrete.

Livermore Librarian On Panel Discussion

Advantages and use of automation techniques in ordering and routing trade publications and technical journals will be discussed by Elizabeth Bodie (8233-2), librarian at Livermore Laboratory, at a meeting of the California Library Association today.

Her talk will be presented during a panel discussion at a meeting of the association's Northern California Technical Processes Group at San Francisco State College.



SEAT BELTS saved the passengers, but not the Jeep. Gordon Ross (3121-1), left; Darrel Brown (3121-1); Jay Davidson (3121-2); Walt Dodd (3121-1); and Jack Mafit (3121), not pictured, put the safety belts in the Jeep to good use during a recent fishing trip. Although Jeep overturned twice, none were injured.

Sandians Are Retirement Bound

Alfred J. Brady

Alfred J. Brady will retire the end of May after 12 years at Sandia Laboratory. He is a rigger

crane operator in Machine Shop Division 4251.

Following retirement, Mr. Brady and his wife will return to Rochester, N. Y., where they were both born and raised.

and raised. Many stops as planned en route.

Mr. Brady enjoys watching baseball and other sports. "I like to fish, and it's convenient to do so there. Lake Ontario is only seven miles away and the river which runs through Rochester is 18 ft. deep. There's also the barge canal," he said.

The Brady's have a daughter, the wife of Armin Fink (7214).

No job is so important and no service is so urgent that we cannot take time to perform our work safely.

Moises Padilla

Moises Padilla will retire the end of May after 12 and a half years

at Sandia Laboratory in Janitor Service Division 4574.

Mr. and Mrs. Padilla have 12 children, six of them living at home. After retirement, the Padillas and

their six youngest children will take a month-long trip to California.

Upon their return, Mr. Padilla will devote full time to his family and 20 acre farm near Pajarito. He raises cattle and some chick-

E. W. Kersten

Retiring the end of May will be E. W. Kersten (2313-2), who has been at Sandia since October 1952.

During the entireperiod, he has been involved with writing technical training films, a total of more than 100 through the years. One of them, for which



he wrote the script and directed, won a top award in the 1962 American Film Festival.

Although the Kerstens will continue to reside at 1809 Georgia NE, they have purchased a trailer and plan leisurely trips: this summer to western Canada, and next winter to Florida.

Their three children live in Albuquerque, Los Alamos, and Scottsdale, Ariz., all within convenient driving distance.

Mr. Kersten's hobby is operating an amateur radio. He has service awards and letters of commendation from the Air Force, the National Academy of Science, and the DASA scientific organization for his contacts during Operations Dominic and Hardtack.

"One of my most interesting visits via 'ham' radio has been with a radio operator in Little America, Antarctica, a distance of 12,000 miles from Albuquerque. The radio operator is a full-blooded Acoma Indian," he said.

Harry J. Pittenger Harry J. Pittenger of Advanced

Manufacturing Development Section II, 2564-2, will retire the end of May after

four years at Sandia Laboratory.

Sixteen years ago, he and his wife visited here and liked the high, dry climate, but they returned to

explained.

mate, but they returned to their home in Bethlehem, Pa. "We didn't expect to wait so long before moving here," Mr. Pittenger

The Pittengers intend to remain in Albuquerque; their home is at 6609 Rogers NE. Mr. Pittenger plans to relax a couple of months, then decide what he intends to do during his new leisure time.

S. S. Harris

S. S. Harris, manager of Records Management and Services Department 3440, will retire the

end of May after more than 15 years with Sandia Corporation

Two of his years of service were as head of Sandia's installation at Salton

Sea, Calif. Mr. and Mrs Harris intend to

Harris intend to remain in Albuquerque at 704 California SE. Their two pedigreed Boston terriers keep the house lively.

There will be fishing trips. Mrs. Harris was one of the top "fishermen" at Salton Sea, and Mr. Harris enjoys sitting and watching her fish. No doubt there will also be trips to Livermore, Calif., to visit their daughter, Norma Ware, her husband, and two children.

Mr. Harris also enjoys reading, rock collecting, and astronomy, and for some years he has been studying Spanish and mathematics.

Author of Article

An article by C. E. Spriggs (3463) entitled "Industrial Animation, Quality with Economy?" is appearing in the May issue of Industrial Arts Methods magazine.



SECTION WINNERS of 1960 Bell System Postal Chess Tournament are (I to r) Harold M. Meidal (4232-4), Crawford J. MacCallum (5411), Richard C. Jackson

(4421), and Herman S. Levine (5414). Because of postal mechanics, size of tournament, it takes about two years to audit games and to inform the winners.



Bernice Vigil Reporter for 6000 Organization

Bernice Vigil has been at Sandia Laboratory nearly four years and has been a secretary in the legal office for the past two years. She is a volunteer Lab News reporter for Organization 6000.

When not at work she is kept busy caring for her three children -ages 4, 5, and 6. Bernice and her husband Dick (1122) enjoy taking their children fishing and camp-

Bernice also finds time to make clothes for herself, her husband, and the children.

Mexican Buffet Planned At Club

The Coronado Club will feature a special Mexican Buffet on May 24, with dancing from 5:30 to 7:30 p.m. to the music of the Sand City Jazz Band. Prices are adults, \$1.25; children, \$1.00.

The Club will present its regular buffet on Friday, May 31. Social Hour and Dancing will be

from 5:30 to 7:30 p.m. with music provided by Sol Chavez. Prices for the buffet: adults, \$1.95; children, \$1.40.

On June 8, the Dance Class Graduation Ball will be held at the Club. The free dance is open to all Club members. Roast beef dinner will be served at 7:00 p.m. Reservations for dinner are re-

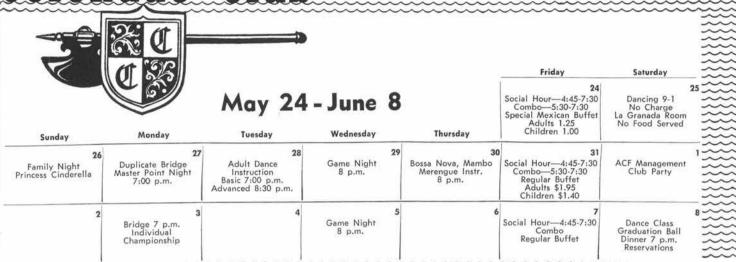
Barbara Harwi and Evelyn Schultz Rank at Top in Women's Tourney

Barbara Harwi (7231) won low gross and Evelyn Schultz (4423) won low net trophies in the Sandia Laboratory Women's Golf Association's first tournament of the season, played May 11 at Rio Grande Estates golf course.

Least putts honors went to Rosalie Crawford (1), and Lillian Hayes (3121) tallied the least strokes, tee to green.

The next tournament for the women's league is scheduled for August in Socorro.

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CLASSIFIED **ADVERTISING**

Deadline: Friday noon prior to week of publication unless changed by holiday. RULES

1. Limit: 20 words

- One ad per issue per person Must be submitted in writing
- 4. Use home telephone numbers 5. For Sandia Corporation and
- AEC employees only
- No commercial ads, please 7. Include name and organization

FOR SALE

WILLYS JEEP, 4-wd, new Arctic cab, \$695. Everett, AX 9-6057.

GREAT DANE PUPPIES, 4 females, 3 males, blacks and harlequin, champion blood-lines, AKC. Holt, 299-5943.

COLLINS RECEIVER, 75A2, \$279; Gonset GSB-100 SSB-AM-CW transmitter, \$279. Senter, AL 5-0594.

'50 BUICK, \$139 trade or terms; refrigerotor, 10.2 c.f., \$40; two 9x12 beige rugs, \$12 each; firewood, \$1/load. Vilella, 299-6261 evenings.

'53 PONTIAC 2-dr. sedan, \$225. Borg, CH 2-8036.

'52 PLYMOUTH, best offer. Huston, 247-

'55 PONTIAC HT coupe, R&H, w/w, \$375; 3 8.20x15 used w/w. Wilson, AX 8-0049.

NOTHING DOWN, Snow 3-bdr., 13/4 bath, separate DR, NE Heights, closing costs under \$50, take over payments, available June 1. Sherman, AL 5-1160 after 5

WHEEL AND TIRE for boat trailer size 530-450-12, 1 new, \$15, 1 used \$8. St. Clair, AX 9-6197.

'57 CHEVROLET Belair 4-dr., V-8, PS, PB, Powerglide, radio, white w/red interior, \$695. Horstman, 5020 Inspiration Dr., AL 6-1471.

GYM DANDY 10' slide, \$5; children's formica top table and 2 chairs, \$8. Stuckey,

2 DACRON SLEEPING BAGS, 3-lb. weight, zip together if desired; car top lug-gage carrier; canoe paddles. Southwick, AL 5-3312.

CRIB, CHEST, playpen, carriage, bathinette, baby swing, Baby-Tenda, baby clothes. Kowolik, AX 9-8411.

67-PIECE SET Winfield china Flower pattern, won in contest, never used. Carter, DI 4-6563.

HOMART 20" window fan, 2-speed forward and reverse w/timer. Jones, AX 8-1391.

TV 21" Sparton table model, wooden cab-inet, \$40 or best offer. Ivey, AX 9-3635.

SPRINGFIELD 1845 musket; Sharps percussion carbine, swap for old flintlock pistol or old handgun. Smitha, 8607 Menaul, AX 9-1096.

4-BDR, 134 bath, 2-car garage, 2040 sq. ft., w/w carpeting, a/c, electric built-in kitchen, dishwasher, patio, sprinklers, GI-FHA appraisal \$17,500, make offer. Bassett, 299-5685.

SPRINGS AND MATTRESS for double bed, \$15. Williams, AM 8-0045.

USED: sofa and chairs, lamp table, end table, double bed, Simmons box springs and mattress, chest of drawers. Bird, 298-4031.

WESTINGHOUSE electric oven, including cabinet and baking dishes. Hayes, AM 8-1596.

24" ZENITH television, walnut console, \$50. Porter, AL 5-8495. ADMIRAL REFRIGERATOR, \$40. Potter, AM 8-5451 after 5 p.m.

TABLE AND BUFFET, solid mahogany, completely refinished, w/pads, and mahogany inserts, table seats 8, \$50. Coughenour, 299-0914.

7×57 REMINGTON rolling block rifle w/ cartridges and reloading dies, \$25; .22 cal. Ruger automatic pistol, \$27. Klett, DI 4-9021.

ACCORDIAN, 120 bass w/case, \$75. Crosby, AX 9-1459 after 5 p.m. '56 CADILLAC. Apodaca, 3130 Barcelona SW, 877-4537.

3-SPEED WINDOW FAN, thermostatically controlled and electrically reversible motor. Wright, 299-8939.

PUPPIES, Boston Terrier, 6 weeks old, AKC registered. Johnson, DI 4-1410. WILSON GOLF CLUBS, 1/2 set matched, men's right handed, irons — 3, 5, 7, 9, P; woods—1, 3 w,covers; golf bag, \$45 total. Precit, AX 9-3438.

"MODERN SHOP PRACTICE" 9-volume home-study course and reference on machine shop work, tool making, weld-ing, etc., \$15. Stark, 299-5953.

ing, etc., \$15. Stark, 299-5953.

15 HP OUTBOARD MOTOR, Sea King. Hinman. AM 8-8550.

'58 FORD SHOP MANUAL and spare parts. Ezell, 268-4845.

'56 FORD 3/4-ton pickup w/long box, 3-speed transmission. Stanley, 265-1080.

SELL OR TRADE: Shopsmith Model ER, \$225; Peddler clarinet, \$65; size 8 girl's ice skates, \$8; 10×13 umbrella tent, \$40. O'Neal, AX 9-9134.

TWO refrigerated window style air con-

TWO refrigerated window style air conditioners w/heating element. Cooper, 877-4674.

'63 BSA 650 cc Gold Star Twin, 500 miles, take over payments. Wilhelmi, AL 5-2561.

'60 PONTIAC 2-dr. Catalina, R&H, Hydramatic. Sample, AL 6-6968.

ALL-BAND MOBILE TRANSMITTER LE26, \$8; tuneable SCR-522 w/115 VAC pwr. supply, \$75. Bassett, 10320 Apache NE, 299-5685.

MANKIN 3-bdr, 13/4 bath, no down payment, drapes, near schools, shopping center. Kennedy, 2912 Aliso NE, AX '48 WILLYS JEEPSTER, completely rebuilt, \$650. Mabie, AX 8-1535.

TAPE RECORDER, four track stereo head-set, playback, 70 hrs. of recorded music. Carrillo, CH 7-9700.

BOY'S 26" 2-speed bike, thorn resistant tubes, \$8. Stuart, AX 9-9190.

Delong, 2336 Alvarado NE, 255-4684.

39" ROLLAWAY Bed, innerspring mat-tress. Schenck, 8104 Princess Jeanne Ave. NE, AX 9-0585.

PORTABLE AIR conditioner w/roll-aroundstand; umbrella type dryer (large enough for full sheets). Pace, AX 8-1112.

POWER MOWER, 19" rotary, Stratton motor, 1 yr. old, used 6 times, will trade for reel power mower of equal value. Fisher, 265-0626.

RADIO for 1957 Olds, Deluxe Model. Bortniak, 298-5093

AQUARIUM, 10 gal.; baby car bed; baby bed; mattress; table lamps. Spray, AX 9-0412.

2 PLYMOUTH station wagon, \$125. Parsons, AX 9-0400.

CHROME luggage bars (adjustable), luggage rack, 4'x7'x10", plywood floor, fitted canvas cover, \$50; mattress, \$5. Dalby, AM 8-3288.

20" ROTARY power mower, \$10; 7 cu. ft. refrigerator, \$40. Rebarchik, AX 9-1385.

3-BDR HOME, garage, landscaped, walled, take over payments, \$81 non vets, \$71 w/exemption, Carlos Rey Addition. Gonzales, CH 7-1916.

TWO-WHEEL HAULING TRAILER, metal frame, springs, 42x72" wooden bed w/bumper hitch. Barber, 299-4287.

ONE BUCK RABBIT, eight months old, good strain, choice of black or white. Breitenbach, 268-7900. BUILDING LOT, NE location; Mobile Maid dishwasher; Universal-type trailer hitch; lawn edger. Dodd, AX 9-6330.

EVAPORATIVE COOLER for car, 12-volt, Sears, floor model; ½-mil mylar recording tape, \$2.50 for 7" 2400' roll. Smith, 268-2141.

NEXT DEADLINE

FOR SHOPPING CENTER ADS Friday Noon, May 31

PIANO, upright, remodeled dark mahogany; kitchen set, yellow formica and tubular steel, 4 chairs. Toft, 298-5678.

RCA VICTOR 21" console TV, tone control, 2 audio inputs, 12" speaker, just completely overhauled, \$65. Pazel, 298-5805.

'58 FORD FAIRLANE 500 convertible, PS, automatic transmission, R&H, power top, seat belts; LP records. Gold, 256-7730.

RECEIVER, National NC-98, general coverage, .5-40 Mc, w/matching speaker, \$75. Moore, 256-6065.

3-BDR, den w/fireplace, 1 3/4 bath, carpeting throughout, drapes, a/c, sprinklers, double carport, \$14,500. Wente, 1816 Blume NE, AX 9-3402. 1963 RCA Mark 8 color TV w/antenna installed, \$650. Jones, AM 8-1215.

DOUBLE SINK, 21", porcelain, w/mixer faucet, basket strainers, and misc. pipe and fittings, \$15. Fortman, 256-2105.

'55 PLYMOUTH 4-dr. V-8, auto. trans. Balok, AX 9-4394 after 5 p.m.

'56 BUICK SPECIAL 2-dr. HT, low mileage, \$450. Rathbun, 298-4745 after 6 p.m. '54 MERCURY HT, low payments. Ward,

3-BDR BRICK, 1 3/4 bath, \$800 FHA plus closing, or pay equity and assume 4½% Gl. Poore, 2713 Valencia NE, AM 8-2036.

1.2 ACRES, Canyon Estates development, Tijeras Canyon. Howard, 282-3158.

DOUBLE OVEN ELEC. RANGE; 3 pr. Pris-cilla curtains; 2 fireplace screens, one grate; space heater w/thermostat; elec. Metronome. Marceau, AL 5-2343.

USED BUILDING MATERIALS, doors, window, glass panels, etc., \$80. Browning, 2616 Virginia NE, AX 9-0169.

BOAT, MOTOR, TRAILER, 10' Morrison, 2023 Robert-

camper, all new. Morrison, 2023 son SW, TR 7-3656 after 6 p.m. ENGLANDER SOFA BED w/innerspring mat-

tress; engineer boots, brown, Saf-T-Toe, 101/2D, worn one month, \$10. Love, AX 9-0956. TABLES, 2 blond end tables and round coffee table, formica tops, \$15. Hayes,

4-BDR ROBERSON Anniversary Model, DR den w/fireplace, 1 3/2 plus 1/2 bath, corner lot, \$24,250. Walter, 9916 Toltec Rd. NE, AX 8-0627.

3-BDR. HOME 1 3/4 bath, den, 1850 sq. ft. living area, \$23,500 or make offer. Dill, 4020 Smith SE, AM 8-3796.

PORTABLE ROOM AIR conditioner; large rear seat from International Travelall. Miller, 298-2850.

'60 FORD station wagon, 36,000 miles, 4-wheel drive, 6 cylinders. Hiemer, AX 9-4501.

PUPPIES, purebred male Dachshund, weeks old, no papers, \$25/ea. H 7501 Morrow Rd. NE, AX 9-8832.

'58 CHEVROLET station wagon, all power, a/c, sell or trade. Capaldi, 2013 Palomas NE after 5 and weekends. '56 BUICK Roadmaster, PS, PB, R&H, w/w, 4-dr., \$275. Disch, AX 9-1201 or AX 8-2851.

WINDOW FAN, 3-speed forward-reverse, thermostatic control. Kane, AX 8-1717. 2 STUDEBAKER, rebuilt motor. Brooks, 282-3184.

FREE KITTENS, 6 weeks old, male, choice of solid black or dark stripes, long hair. Wade, 299-2050. UNEEK EQUIBAR TRAILER HITCH, \$35; 20" 2-speed fan, \$10; auto window cooler, make offer. Westman, AL 5ROBERSON 3-bdr, 1 3/4 bath, pitched roof, built-ins, a/c, carpet, drapes, walled, front sprinklers, fireplace, near schools. Bytheway, 1837 Gretta NE, 299-2791.

UPRIGHT PIANO, \$100; 21" television, \$40. Ortega, CH 2-9424. '55 FORD Country Sedan, \$225; 2-speed Allstate evap. type car cooler, 12-volt, \$15. Shadel, 299-5537.

ARGUS #515 auto. color slide projector w/5 magazines, \$20. Davenport, 268-7002.

'50 HUDSON, \$50 or best offer buys. Wheeler, AL 6-6230.

AIR COOLER, large portable evaporative type, 3-speed; trailer hitch for Volks-wagen sedan, \$10; stainless steel lug-gage rack, will fit small cars, \$20. Schnetzer, 255-0416.

24" 3-SPEED FAN; car cooler; bowling ball and bag; dishwasher; twin mat-tresses. Piraino, 255-5126.

3-BDR., 1 3/4 bath, family room, drapes, carpet, walled, landscaped, 4 yrs. old, \$14,300, FHA, GI or equity to present GI. Harrison, AX 9-3349.

MODEL-A pickup, new engine, ideal for restoring. Collins, AM 8-3612.

MAHOGANY bar top 88" long, \$25. Bas-com, AX 9-1662.

BOSTON BULLDOG PUPPIES, 3 males, 2 females. Morris, 920 Kentucky SE, AL 6-0152.

CARPET, 8½ x 12, nylon Filorama, unused, \$40. Jacobson, 299-5627. 3-BDR, den, bath, sprinklers, a/c, disposal, walled yard, patio, 6 fruit trees, close to everything, \$11,900. McFall, AX 8–1552.

'56 FORD V-8, standard transmission, \$195. Davis, 9631 Morrow Rd. NE, AX 8-2108 after 5 p.m.

'58 OLDS SUPER 88, Holiday coupe, white, \$895; 16 HP outboard motor, 6 gal. tank, \$165. Gregory, AL 5-8066.

3-BDR HOME, carpet, a/c, wall, corner lot, GI loan, \$250 down. Ahr, AM 5-0653.

GUITAR w/pickup, \$95; mandolin w/pick-up, \$40; GE power ironer, \$20. Abbott, AX 9-8860. UFFET, dark m

60 x 36", \$75. Gustafson, AX 9-3270. '54 FORD 6, 2-dr., \$225. Snyder, AX 9-

3-BDR HOUSE, 13/4 bath, hw/floors, \$17,-500, \$700 down and closing costs. Risk, AX 9-9466.

2-BDR HOUSE, Fair Plaza area, FHA appraisal w/terms to suit. Van Dusen, AX 8-1091.

CAR COOLER, 12-volt, \$15. Komen, AX 9-8881. AIRCO welding torch w/4 tips, \$10. Allen, AX 9-9075.

MOSSMAN at FHA appraisal, 3-bdr, land-scaped, fireplace, near Base and schools, many extras. Barba, AX 9-5832.

3-BDR MANKIN, near bases, hw/floors, sprinklers, a/c, patio, pitched roof, FHA, \$12,500. Tanaka, 345 Glorieta NE, AX 8-0489 evenings or weekends.

3-BDR 1½ bath, attached garage, ½ acre lot, \$50 down, \$12,900. Cummings, 298-5173 after 5 p.m. STEVENS bolt action 30-30 rifle, \$30; 2 pr. size 12 Boy Scout shorts, \$1/ea. Scranton, 299-4902.

CRIB w/mattress, \$15: tricycle, \$5: pen, \$6; formica Baby Tenda, \$8. Inglat, TR 7-1146.

EVAPORATIVE AIR COOLER for automobile, 6-volt, sits on floor of car, \$20. Weber, AX 9-1389.

'56 MGA. Warden, AL 5-0557. d' GIRL'S bicycle; aluminum screen door; glass panel outside door; Lionel train set; Westinghouse electric roast-er; couch. Blaine, 299-1036.

'48 CHEVROLET, \$100. Hereford, AX 8-

3-BDR. Roberson, 13/4 bath, family room, carpeting, drapes, near school, low down payment, assume monthly payments. Ray, AX 9-5278.

SPRINGFIELD RIFLE, model 03 in .22 cal.; Stitchmaster sewing machine in walnut cabinet w/attachments; want old guns and coins. Zaluga, DI 4-1564.

STURDY LOG CHILD's playhouse; Emer-son 21" console TV; Westinghouse electric oven; Kenmore automatic wash-er, best offers. Lawrence, AL 6-2613. NEW TMI Grolier Self-tutoring device w/ Algebra II, spelling, statistics, \$10; Woodstock office typewriter, \$10. Hen-

ry, 255-2536. 3-BDR., walled corner lot, 2 baths, pan-eled den w/fireplace, a/c, attached garage, drapes, range, sprinklers, 11017 Phoenix NE. Ray, AX 8-0408.

WANTED

DRIVER to share expenses on trip to New York City. Leaving Aug. 22, return Sept. 8. Gottlieb, 345-1009 after 6

BOAT and motor with or without trailer, suitable for taking a boy fishing, must be reasonably priced. Kliner, 6210 Bel-lamah NE, AL 6-1907.

TO TRADE deer rifle for welding outfit. Pritchard, 268-9618.

LARGE electric-start outboard motor, Johnson or Evinrude 75 HP preferred, will trade smaller motor or pay cash. Meikle, AX 9-4640. TO RENT UNFURNISHED 2-bdr. apt. for

young couple w/one child. On or about June 15th-July 10th. Bridegam, 268-1973 after 6 p.m. TRADE FC170 Jeep w/Timpte flatbed, fold-down cattle rack for late model 4-wd pickup or trade for FC-170 pickup bed plus cash. Martin, AL 5-2335.

CENTRIFUGAL IRRIGATION PUMP w/220 volt single phase 1 HP motor. Stamm, DI 4-7431.

TRADE Roberson 3-bdr, 13/4 bath, DR, built-in range, utility room, double garage, covered patio, sprinklers, desire Mankin home south of Los Altos Golf Course. Stiver, 1825 Propps SE, AX 8-0415.

OLD tinplate trains and catalogs, Lionel O and Standard, Ives, American Flyer, Boltamp, Hornby, Dorfan, Kanode, 408½ Cornell SE, CH 3-0493. RETARDED or handicapped child to board, will transport to special schools where necessary. Barnes, 877-2061.

TO BUY old issues of Model Airplane News magazine. Breitenbach, 268-7900. GOOD COUNTRY or ranch home for a beautiful male German Shepherd.

beautiful male Delong, 255-4684. REFRIGERATOR with or without freezer; also need a pony or horse for kids, will board, buy or trade. Brathovde, Frost Road.

RIDE from 5600 block Central. Ortega, CH 2-9424.

FOR RENT TRAVEL TRAILER, 15', sleeps five, tows easily. Colp, AM 8-8035.

ROTO TILLER, 3½ HP, gas driven. Bortniak, 298-5093.

3-BDR. HOUSE, den, a/c, patio, land-scaped, walled, water paid, \$125 month, available June 15. Morrison, 809 Indiana SE, ext. 33207. UNFURNISHED 1 or 2 bdr. apt, stove and refrigerator, cooler, carpeted, private patio. Bentz, AX 9-2961.

FURNISHED, clean 1-bdr. apt, lots of closet and cabinet space, double sink, no pets. Laurence, see at 304 Wyoming NE.

LOST AND FOUND

LOST—4 or 5 keys on ring, lady's Zippo lighter w/stone set, tan wallet w/ID John Stohler. LOST AND FOUND, ext. 29157.

FOUND—Gold clip flower earring. LOST AND FOUND, ext. 29157.

Quality Control Science, Education Promoted by Active ASQC Section

This is another in a series of articles describing activities of member organizations of the New Mexico Council of Technical and Scientific Societies.

"Create, promote, and stimulate interest in the advancement of the science of quality control and its application to industry and business" is the objective of the Amer-Society for Quality Control.

Working toward this objective, the 144 members of the local chapter have sponsored statistical quality control courses with the University of New Mexico Community College, arranged workshops, held conferences and symposiums, and published technical

Organized in 1954, the Albuquerque Chapter has grown from 30 members to its current size. The chapter has twice been designated as a "Master Section" by the national society. This honor is awarded for excellence in handling affairs relating to programs, education, organization, and membership of the chapter as well as contributing to the welfare of society.

Phil H. Bircher (7513) was chairman of the original organizing committee for the local ASQC. Aldis Hayes (2344) was the first

Current officers include T. D. Harrison (2561), chairman; E. E. Ard (7512), vice chairman; H. E. Walker (1443), treasurer; and B. G. Chappell (Albuquerque Gravel Products Co.), secretary.

The section has recently completed a four-session ASQC Inspection Workshop which covered surface plate inspection, principles of gage design, paper gaging, and optical chart design. E. S. Roth (2564) was chairman of this section educational project. Next project of the chapter will be a Reliability Training Conference to be held at the Bishop's Lodge in Santa Fe, June 10-14. The conference is designed specifically to aid engineers and engineering management in understanding reliability techniques and courses of ac-

Sandia **Speakers**

Following is a list of speakers, titles, and places of presentation for recent or forthcoming talks by members of Sandia Corporation.

Marvin Moss (5132), "Thermal Conductivity of Plastically Deformed CaF2 and LiF," University of Illinois, May 21, Urbana.

E. K. Montoya (7242), "Real-Time Automated Checkout with Small Scale Computer," Spring Meeting of the Rio Grande Chapter of the Association for Computing Machinery, May 3, Scottsdale, Airz.

Promotions

Samuel Salazar (4574) to Janitor
Reynaldo Gonzales (4574) to Janitor
N. J. Gallegos (4574) to Janitor
Frank R. Garcia (4574) to Janitor
Pronciano Barela (4574) to Janitor
Cecilia R. Martinez (3126) to Stenographer Clerk
Maria C. Gomez (3126) to Stenographer Clerk
Barbara A. Rothwell (3126) to Typist Clerk
E. Ruth Barth (4413) to Draftsman
Alice L. Smith (4413) to Draftsman
C. Ruth Harshe (4413) to Draftsman
H. W. Richardson (7324) to Staff Assistant—
Technical

Technical Joseph F. Genoni (8234) to Staff Assistant— Administrative John H. Lloyd (7164) to Staff Associate—

John H. Libyd (104) to Statt Associate—
Technical
Jean E. Ison (4333) to Teletypewriter Operator
Billie A. Hayes (3126) to Secretarial
Stenographer
Mary A. Bordenave (3126) to Senior Clerk
Marlin C. Klemm (3444) to Mail Clerk
M. M. Stephenson (3446) to Editing Clerk
Hamilton L. Landers (8232) to Reproduction
Equipment Operator

M. M. Stephenson (3446) to Editing Clerk
Hamilton L. Landers (8232) to Reproduction
Equipment Operator
Helen G. Locke (8212) to Stenographer Clerk
Robert D. Corbett (8232) to Mail Clerk
Carol A. Portolese (8232) to Stock Record Clerk
Madison L. Sharp (8232) to Stock Record Clerk
Diego Gonzales (4574) to Laborer
Abelicio Molina (4375) to Laborer
Frnest P. Gurule (4614) to Utility Operator
Betty J. Brumfield (3453) to Record Clerk
Winford G. Mabery (4542) to Staff Assistant—
Technical
J. N. Barnhouse, Jr. (8214) to Receiving Clerk
Rita L. Beeman (8232) to Message Center
Equipment Operator
F. E. Cunningham (8213) to Accounting Clerk
Doris A. Little (4361) to Stenographer Clerk
Edward J. Hodyke (4212) to Toolkeeper
D. R. Metheny, Sr. (4574) to Janitor
Ralph E. Hendrix (4624) to Packer
Rosalie A. Gallegos (4611) to Stock Record Clerk
William F. Lewis (7311) to Laboratory Assistant
Supervisory Lateral Transfers

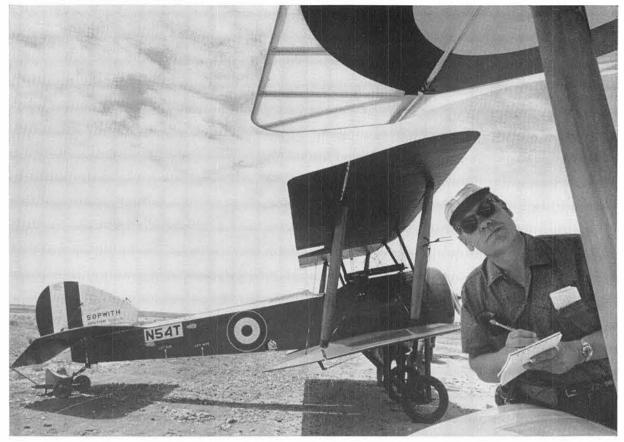
Supervisory Lateral Transfers R. Lynes from 3442 to 3456 E. K. Baker from 3341 to 4212 B. D. Neil from 4212 to 4211

tion to meet and surpass stringent reliability requirements at minimum cost.

Other ASQC conferences in the past have attracted regional recognition. Dr. J. M. Juran, author of Quality Control Handbook, and Dr. W. Grant Ireson, executive head of the Department of Industrial Engineering, Stanford University, spoke at an ASQC-sponsored symposium in Albuquerque

Each year the section provides a \$200 scholarship to an outstanding University of New Mexico junior or senior majoring in engineering and who has completed a course in statistics. The section also contributes funds to the New Mexico Council of Technical and Scientific Societies' efforts to promote science education and National Engineers' Week.

ASQC was organized nationally in 1946. It has 15,400 members in 119 chapters. National publication of the organization is Industrial Quality Control.



CONSTRUCTION DETAILS of replicas of World War I airplanes displayed at the recent Armed Forces Air Show were of extreme interest to Jim Breitenbach (7323). He is a member of Cross and Cockade, the Society of World War I Aero Historians, and reported the event for the Society Journal. He is examining a Nieuport II in the foreground. In back is a Sopwith Pup. Also on display was a replica of a Fokker E-III.

Investment in Science

Excerpts from a talk by Sir John Cockcroft, President British Association for the Advancement of Science (Delivered in Manchester, England, on August 29, to the Association)

Reprinted from Time Magazine, Sept. 7, 1962 (Courtesy Time, Inc.)

"I am speaking then in an environment which has a long tradition of pioneer work in science and technology so I am going to talk about 'Investment in Science' —a subject which is more important to our country today than it has ever been . . .

"While pure basic research provides the essential pool of new knowledge from which, sooner or later, practical developments follow, objective basic research, searching for applications of new knowledge and followed by applied research devoted to a specific project, are among the principal promoters of economic growth today. So investment in such research should be regarded as of comparable importance to investment in plant and buildings

"One of the most spectacular examples of economic growth achieved in this way has been the development of the transistor industry. Twelve years or so ago I visited the Bell Telephone Laboratories in New Jersey and saw scientists drawing single crystals of very pure germanium from a molten mass. These very pure crystals were seeded with small quantities of vital impurities and then cut up to form the transistors which are now most familiar to us in our portable wireless sets. Their influence on the development of electronics has been very great. Their great reliability and small power requirements have led to a reduction in size and a great increase in reliability of electronic equipment. Without them, space science and space travel would scarcely have been possible. They have also made possible the very much more powerful next generation of computers . . .

"Until very recently, the phenomenon of metals losing their resistance to the passage of electrical current at temperatures near absolute zero—the phenomenon of superconductivity - was an academic subject, pursued almost entirely in university research laboratories. Within the past two years important practical applications of superconductivity seem to be emerging. The Bell Telephone Laboratories discovered that an alloy of tin and niobium remains superconducting in magnetic fields of up to 120,000 gauss, and already superconducting coils have been built to produce magnetic fields of more than 40,000 gauss with practically no power requirements. So the strong magnetic fields required for many experiments in nuclear physics, controlled fusion research and other subjects are likely, in future, to be produced in this

"Another important application of solid-state physics, the so-called optical 'maser,' has also come from the Bell Telephone Laboratories during the past two years. Maser is a short word for microwave amplification by stimulated emission of radiation. The principle of atoms being raised to excited states by absorption of radiation, and afterwards being stimulated by radiation to give out their stored energy, has been known in science for a very long time. The maser consists of a synthetic ruby crystal containing chromium ions which can absorb and store light in excited states of the chromium atoms. After a time the stored energy is emitted in a powerful short flash, which in some cases has reached the equivalent of 1,000 kw in intensity. The radiation is emitted in an extremely narrow frequency band, and the beam of radiation can have a divergence of less than one minute of arc. Already this has been used to illuminate an area of two miles diameter on the Moon and reflexions observed. The very narrow, powerful beam can pierce holes in refractory metals, since a volume having a diameter of a hundredth of a centimetre can be raised to a temperature of about 8,000 °C. There will be applications in biology and many other fields, so again new vistas open . . .

"We have, I think, a good deal to learn from some American organizations who have a consistent record of success in developing new products by objective basic research followed by applied research and developments."

Welcome Newcomers

May 6-17

Albuquerque	
Joe P. B. Armijo	344
Barbara Bergame	312
Thelma E. Kerr	
Joe N. Lovato	457
Waldo Lucero	457
Barbara M. Navratil	312
Jose C. Ortiz	457
Maureen C. Torres	

Florida Chauncey W. Matthews, Miami Beach 4412 Michigan
Eugene C. Styberski, Iron Mountain 2544



DOUBLES CHAMPS of the Sandia Laboratory table tennis tournament admire trophies they collected recently. Larry Woolrich (7322) and Milt Madsen (7324), foreground, defeated Tommy Kelly (2441) and Paul Spellman, Jr. (2444), in the finals to take the championship.

7300-1 Wins Volleyball Honors

Team 7300-I is the champion of D. W. Bauder (7323), R. L. Hen the Sandia Laboratory volleyball competition. The team took the championship of the Redbird League with a 7 won-no loss record and went on to sink 7300-II four out of six times in the playoffs for the Laboratory crown. The 7300-II team took the Thunderbird League championship with a 7 won-no loss record. Team members of 7300-I are

derson (7311), W. V. Hoffman (7323), W. C. Wilson (7325), W. R. Kampfe (7323), R. M. Workhoven (7323), R. L. Peabody (7324), and H. J. Blechinger (7323), manager. Members of 7300-II are T. H. Traver (7323), P. G. Sullivan (7323), R. J. Klingler (7324), R. L. Posey (7324), R. H. Mathews (7325), J. E. Randall (7325), and J. V. Otts (7324), manager.

Sandia's Safety Record

Sandia Laboratory HAS WORKED 630,000 MAN HOURS OR 18 DAYS WITHOUT A DISABLING INJURY

Livermore Laboratory HAS WORKED 138,000 MAN HOURS OR 26 DAYS WITHOUT A DISABLING INJURY